ABSTRACT

A torsional-vibration damper for decoupling the torsional vibration between a drive assembly and a secondary assembly is disclosed. The damper includes a first connector operatively connected to one of the assemblies, a pressure body connected to the first connector, a second connector operatively connected to the first connector permitting transmission of rotational motion therebetween, an axial displacement limiter, and a ramp unit. The ramp unit includes a resilient member and a ramp body that is connected to the second connector. The ramp body includes first and second ramps that are operatively interactive with the pressure body. The first and second ramps define a stable position when the first and second ramps and the pressure body are pressed into engagement with one another by the resilient member. The first and second connectors are rotatable with respect to one another through a predetermined angle of rotation measured from the stable position.